1. How would you describe an x-ray if you were describing it over the telephone (use standard approach).

Must include the following attributes:
1. quality of film
2. rotation
3. bony structures
4. soft tissues
5. vascular structures
6. lung regions (lobes)

2. You are evaluating a patient’s ability to live on his/her own. List five of the six BASIC Activities of Daily Living (ADLs) that a patient must perform everyday:

1. bathing
2. ambulation
3. toileting
4. transfers
5. eating
6. dressing

3. Birth control pills have been found to have an efficacy of 99% but an effectiveness of only 94%. Describe what is meant by these findings.

1. Efficacy is what happens when the medicine is used exactly as directed.
2. Effectiveness if what happens with the true use by the population.

4. A 45 year old woman presents with a four-day history of intermittent chest pain, occasionally with shortness of breath. She is a divorced, single mother of three teenagers who works as an administrative assistant. She recently injured her back and is occasionally taking antacids. What systems are likely ones to consider in this patient for the cause of her chest pain? List them in order of likelihood and describe why you have included them on the list.

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<th>System</th>
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We are looking for the thought process rather than content. Should include application of diagnostic reasoning sessions e.g. vindicate.
5. For the patient described above, choose one of the systems you have identified then decide what processes you feel are likely. List them in order of likelihood and describe why you have included them on the list.

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We are looking for the thought process rather than content. Should include applications of diagnostic reasoning sessions e.g. vindicate.

6. A 50 year old obese diabetic woman presents with increasing shortness of breath over the last five days. The shortness of breath is worse at night and she has a frothy cough. What diagnoses are you considering?

- Myocardial infarction
- Congestive heart failure.
- Metabolic derangement secondary to diabetes.
- Pneumonia
- Valvular heart disease
- Arrhythmia
- Bronchitis

7. (cont. from above case) What specific physical exam findings would you like to look for to help confirm your thoughts regarding the differential diagnosis?

- Laterally displaced PMI
- Rales/rhonchi on lung exam
- Pedal edema
- Enlarged liver
- Increased JVD
- Fever
- Heart murmur
8. (cont. from above case) What specific tests would you consider obtaining and why do you wish to order them? (Note: Multichemistry SMAC not accepted). Be specific. You may include tests other than blood.

- EKG
- Glucose
- Sodium/potassium
- Chest x-ray
- CBC
- Echocardiogram
- Troponin; CPK
- BNP

9. What is meant by the term “relative risk” in epidemiologic studies?

The ratio of risk of disease or death in the exposed to the risk among unexposed.

10. You are studying the efficacy of a new drug for hypertension. You have a treatment population (this group has received the new drug) and a control group (this group is not being treated with the new drug). Describe the null hypothesis for this study.

The null hypothesis = there will be no difference in the result of treatment between the group treated with the new drug and the control group.

11. Please list three positive and three negative features of case control studies (short answers please):

Positive:
1. good for rare diseases
2. relatively cheap
3. relatively fast

Negative:
1. subject to bias
2. subject to confounding
3. only one outcome
4. can’t measure relative risk directly
5. controls may be hard to identify

12. Three ways of discerning peritoneal signs are:

- Obturator or Psoas Signs
- rebound
- guarding
- percussion
- heel tap
- rectal exam
- CVA (tenderness) percussion